

CLAIMS

- 1) Method of random access by a user to a shared resource according to a protocol of the ALOHA type, the instant of transmission of a data packet by the user being supplied by at least one random variable in which certain time ranges of access to the resource have been the object of a prior booking, characterised in that said random variable is temporarily modified into a random variable of the same mean and greater variance when transmission at said instant would result in a breach of the booking.
- 2) Method of random access according to claim 1, characterised in that a booking breach is established when the transmission instant of the data packet falls within a booked time range.
- 3) Method of random access according to claim 2, characterised in that a booking breach is also established when the acknowledgement of the data packet is expected within a booked time range.
- 4) Method of random access according to claim 2 or 3, characterised in that the ALOHA protocol is a discrete ALOHA protocol and the booked time ranges are transmission intervals.
- 5) Method of random access according to one of claims 1 to 4, characterised in that a first random variable supplies a first transmission instant (T_{transmit}) and that the first random variable is temporarily modified into a random variable of the same mean and greater variance when transmission at the first instant would result in a breach of the booking.
- 6) Method of random access according to claim 5, characterised in that the step of modifying the first random variable consists in adding to it a balanced random variable.
- 7) Method of random access according to claim 6, characterised in that, if the transmission instant supplied by the first random variable as modified is in breach of the booking, the step of adding the balanced random variable is iterated until the

transmission instant supplied by the first random variable is compatible with the booking.

8) Method of random access according to one of claims 5 to 7, characterised in that a second random variable ($T_{\text{Retransmit}}$) supplies a second transmission instant if the packet transmitted at the first instant is in collision and the second random variable is temporarily modified into a random variable of the same mean and greater variance when transmission at the second instant would result in a breach of the booking.

9) Method of random access according to claim 8, characterised in that the step of modifying the second random variable consists in adding to it a balanced random variable.

10) Method of random access according to claim 9, characterised in that, if the transmission instant supplied by the second random variable as modified is in breach of the booking, the step of adding the balanced random variable is iterated until the transmission instant supplied by the second random variable is compatible with the booking.

11) Method of random access according to one of the preceding claims, characterised in that the user carries out a measurement in at least one of the booked time ranges, for example, reserved for parameter measurement on the network or other access networks.

12) Method of random access according to one of the preceding claims, characterised in that the user is a mobile station.